

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A reflection mask blank for EUV exposure, comprising:
a substrate;
a multilayer film formed on the substrate to reflect EUV light;
an intermediate layer formed on the multilayer film; and
an absorber layer formed on the intermediate layer to absorb the EUV light;
the intermediate layer being formed by a material containing Cr and at least one element selected from the group consisting of N, O, and C.
2. (original): A mask blank as claimed in claim 1, wherein:
the absorber layer is formed by a material containing Ta.
3. (original) A reflection mask for EUV exposure, comprising:
a substrate;
a multilayer film formed on the substrate to reflect EUV light;
an intermediate layer formed on the multilayer film;
an absorber layer provided with a pattern and formed on the intermediate layer to absorb the EUV light;
the intermediate layer being formed by a material containing Cr and at least one element selected from the group consisting of N, O, and C.
4. (original) A mask as claimed in claim 3, wherein:
the absorber layer is formed by a material containing Ta.
5. (original): A method of producing a reflection mask for EUV exposure by the use of the reflection mask blank for EUV exposure claimed in claim 1 or 2.
6. (original): A method of producing a semiconductor device, comprising the steps of:

transferring a pattern on a semiconductor substrate by the use of the reflection mask for EUV exposure claimed in claim 3 or 4.

7. (New) A mask blank as claimed in claim 1, wherein:

the intermediate layer is at least one material selected from the group consisting of $\text{Cr}_{1-x}\text{N}_x$, $\text{Cr}_{1-x}\text{O}_x$, $\text{Cr}_{1-x}\text{C}_x$, $\text{Cr}_{1-x-y}\text{N}_x\text{C}_y$, and $\text{Cr}_{1-x-y-z}\text{N}_x\text{O}_y\text{C}_z$.

8. (New) A mask blank as claimed in claim 1, wherein:

the intermediate layer is $\text{Cr}_{1-x}\text{N}_x(0.05 \leq x \leq 0.5)$.

9. (New) A mask as claimed in claim 3, wherein:

the intermediate layer is at least one material selected from the group consisting of $\text{Cr}_{1-x}\text{N}_x$, $\text{Cr}_{1-x}\text{O}_x$, $\text{Cr}_{1-x}\text{C}_x$, $\text{Cr}_{1-x-y}\text{N}_x\text{C}_y$, and $\text{Cr}_{1-x-y-z}\text{N}_x\text{O}_y\text{C}_z$.

10. (New) A mask as claimed in claim 3, wherein:

the intermediate layer is $\text{Cr}_{1-x}\text{N}_x(0.05 \leq x \leq 0.5)$.

11. (New) A mask as claimed in claim 3, wherein:

the intermediate layer is patterned by using the absorber layer as a mask and is $\text{Cr}_{1-x}\text{N}_x(0.05 \leq x \leq 0.2)$.